REMARKS

Reconsideration and allowance are requested.

The Examiner is respectfully requested to initial the item listed in Other Documents as "International Search Report" on the PTO Form 1449 in the Information Disclosure Statement submitted January 7, 2005.

The Examiner neglected to initial the PCT International Search Report cited on the IDS form. A copy of that form with that entry initialized is requested.

The abstract is included as a separate sheet as requested.

Claims 17-19 stand rejected under 35 U.S.C. §112, second paragraph for a formatting irregularity caused by the automatic claim numbering feature in Word. Claim 17 is amended to correct that irregularity. The Examiner's treatment of claim 17 as being dependent on claim 16 was correct. Withdrawal of this rejection is requested.

Claims 1 and 13 stand rejected under 35 U.S.C. §112, first paragraph as not enabled. This rejection is respectfully traversed.

The specification describes non-limiting, example implementations that enable claims 1 and 13. However, to respond to the Examiner's concern, claims 1 and 13 are amended to recite additional essential structure of the optical frequency domain reflectometer (OFDR) in claim 1 and steps implemented in an OFDR in claim 13. Withdrawal of this rejection is requested.

Applicants appreciate the allowance of claims 9-12 and the indication of allowable subject matter in claims 3-8 and 15-19. Allowable claim 3 has been rewritten in independent claim format and thus should now be allowed.

Claims 1, 2, 13, and 14 stand rejected under 35 U.S.C. §103 for obviousness based on Swanson and Medford (Medford is never applied in the statement of the rejection—nor is Medford even listed on the PTO-892 form). This rejection is respectfully traversed.

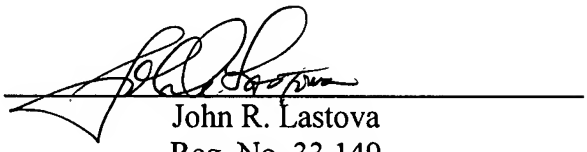
Swanson describes an optical coherence domain reflectometer (OCDR) for performin two and three dimensional scans. Col. 2, lines 24-32. The Examiner relies on the OCDRs shown in Figure 1A. Although it is true that the OCDR in Figure 1A lacks a polarization beam splitter, Swanson lacks, as the Examiner admits, polarization diversity detection. This deficiency is not remedied using an "obvious design choice" rubric.

Swanson also lacks an optical frequency domain reflectometer (OFDR) that includes "a polarization diversity detector for combining light from the measurement path that includes a first interference signal having a first polarization and light from the reference path that includes a second interference signal having a second different polarization." It is clear from Figure 1A that Swanson uses a single detector 52 to detect light that has only one polarization. So it makes no sense to use polarization diversity detection in Swanson "on the combined light that includes the first interference signal having the first polarization and the second interference signal having the second different polarization." Given this fact, there certainly is no reason why one of ordinary skill in the art would think to perform polarization diversity detection in Swanson without using a polarizing beam splitter."

The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
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